

# Data Science Toolbox

Owen McDevitt

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- Measurement: gaining insight into qualitative phenomena through data
- Statistical Programming Languages: using code to run statistical analysis on a computer (Scripted languages are more user friendly, while compiled languages deal directly with the CPU and thus are faster and more powerful)
- Web Scraping: downloading data from publically available places on the internet
- Handling Large Datasets: using RDDs and Spark or Hadoop to make large datasets more manageable while preventing any loss of data due to a computer failing
- Visualization: creating visualizations of the data using a graphics package to see what the data looks like (distribution, trends, correlations, outliers, etc.)
- Modeling: using statistics to test, predict, or explain phenomena or theory